

## REMARKS

### Summary:

Claims 21-21 and 25-34 are presently pending in this application. Claim 21 has been amended. New claims 35-43 have been added. Applicants respectfully request that the Examiner favorably reconsider and allow the pending claims.

### 35 U.S.C. §103 Rejection:

At page 2, paragraph 2 of the Final Office Action, claims 21 and 27-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 6,148,271 to Marinelli in view of U.S. Pat. No. 6,450,953 to Place et al. (herein Place). Applicants respectfully traverse the rejection, and request that the Examiner reconsider and withdraw the obviousness rejection.

The Office Action has failed to meet its burden of establishing a *prima facie* case of obviousness. According to MPEP §2143, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §706.02(j).

As recited above, to form a *prima facie* case of obviousness under 35 U.S.C §103(a) the cited references, when combined, must teach or suggest every element of the claim. See MPEP §2143.03, for example. Applicants respectfully submits that the Office Action has not established a

*prima facie* case of obviousness because the cited references, taken alone or in combination, fail to teach or suggest every element recited in currently amended independent claims 21. Therefore currently amended independent claim 21 defines over Marinelli in view of Place whether taken alone or in combination. For example, currently amended independent claim 1 recites in a salient portion:

. . . at least one relay unit for placement proximate to and stationary within the competitive event area, the at least one relay unit being remote from the mobile sensing units and the base station, for receiving the wireless data representing the at least one performance metric from the mobile sensing units and for wirelessly transmitting said received data to the base station.

The Examiner alleges that Marinelli column 2 lines 47-52 and column 18 lines 35-49 teach a relay unit for receiving the wireless data representing at least one performance metric from the sensing units. Applicants disagree. Applicants reassert their arguments filed February 13, 2007, namely that Marinelli does not teach a relay. In addition to those arguments, Applicants assert that at least FIG. 15 and the description directed thereto further indicate that Marinelli does not teach a relay. For example, FIG. 15 discloses object unit 1500 communicating with monitor unit 1508 and wherein object unit 1500 includes a passive radio transmitter 1506 that operates akin to an RFID tag. *See* Marinelli column 18 lines 15-29. In one embodiment, “. . . monitor unit may be designed to periodically poll object unit 1500 for data, or initiate a polling event in response to a user’s request. . . .” For such an embodiment, column 18 lines 45-48 recite that “. . . instead of transmitting the data, the monitor processor 1512 must load passive radio transmitter 1506 with the data to be sent so that it can be relayed to monitor unit 1508 at the next polling.” Applicants first assert that the recital of the monitor processor 1512 loading the passive radio transmitter 1506 with data is erroneous, and that in fact electronic processor circuit 1504 performs the loading. More

specifically, data representing the spin, g-force, and identification code is loaded into the passive radio transmitter's data hold registry for transmittal upon a subsequent poll from the monitor unit. That data can only be generated by the accelerometer network and processed by the electronic processor circuit of the object unit. *See* FIG. 16 and column 19 lines 8-24. Applicants assert that the data representing the spin, g-force, and identification code is not sent from the monitor unit and returned to the monitor unit, but rather it is generated and stored by the object unit and transmitted in response to a poll by the monitor unit. Further, the monitor unit does not thereafter transmit the data received from the object device. Accordingly, Applicants confirm that currently amended independent claim 21 is patentable over Marinelli in view of Place, whether taken alone or in combination, as Marinelli does not teach at least one relay unit for receiving the wireless data representing the at least one performance metric from the mobile sensing units and for wirelessly transmitting said received data to the base station.

The Examiner further alleges that Marinelli does not teach the at least one relay unit to wirelessly transmit the received data to the base station. Applicants agree as Marinelli does not teach a relay. The Examiner further alleges that Place column 4 lines 21-35 teaches the same. Applicants again disagree and reaffirm their arguments filed February 13, 2007 regarding the spatial relationship among the base station, mobile sensing unit, and relay unit claim elements. While Applicants affirm that claim 21 is patentable without amendment, they have nevertheless amended claim 21 to further clarify the dynamic and static relationship among the base station, mobile sensing unit, and relay unit claim elements to expedite prosecution to allowance. For example, as recited above currently amended independent claim 21 recites relay unit for placement proximate to and stationary within the competitive event area. Place FIG. 1, for example, illustrates portable signal transfer unit 12 engaged to a subject. More specifically, Place column 5

lines 7-10 recite that “[t]he signal transfer unit is designed to be locatable near a physiological sensor device 10 locatable on the chest or other part of a mammalian subject. Accordingly, a suitable location is on a belt around the patient’s waist.” Applicants assert that Place teaches a signal transfer unit in the same spatial frame of reference as a physiological sensor device. Accordingly, Applicants affirm that Place does not teach mobile sensing units for attachment with mobile participants in a competitive event within a competitive event area and at least one relay unit for placement proximate to and stationary within the competitive event area as recited by currently amended independent claim 1. Currently amended independent claim 21 is therefore patentable as it recites at least an element not disclosed by Marinelli in view of Place, whether taken alone or in combination. Further, if an independent claim is non-obvious under 35 U.S.C. §103, then any claim depending therefrom is also non-obvious. *See* MPEP §2143.03, for example. Accordingly, claims 22, 23, and 25-34 are also non-obvious and patentable over Marinelli in view of Place, whether taken alone or in combination, at least on the basis of their dependency from independent claim 21.

At page 3, paragraph 3 of the Final Office Action, claim 22 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Marinelli in view of Place and U. S. Pat. No. 6,292,213 to Jones et al. For at least the reasons described above, Applicants assert that claim 22 is patentable at least for its dependency from patentable independent claim 21.

At page 4, paragraph 4 of the Final Office Action, claim 23 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Marinelli in view of Place and U. S. Pat. No. 5,023,727 to Boyd, et al. (herein Boyd) For at least the reasons described above, Applicants assert that claim 23 is patentable at least for its dependency from patentable independent claim 21.

At page 4, paragraph 5 of the Final Office Action, claim 25 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Marinelli in view of Place, Boyd, and in further view of U. S. Pat. No. 5,993,335 to Eden, et al. For at least the reasons described above, Applicants assert that claim 25 is patentable at least for its dependency from patentable independent claim 21.

At page 5, paragraph 6 of the Final Office Action, claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Marinelli in view of Place and U. S. Pat. No. 6,430,453 to Shea, et al. For at least the reasons described above, Applicants assert that claim 26 is patentable at least for its dependency from patentable independent claim 21.

At page 5, paragraph 7 of the Final Office Action, claims 32-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Marinelli in view of Place and U. S. Pat. No. 5,993,335 to Eden, et al. For at least the reasons described above, Applicants assert that claims 32-34 are patentable at least for their dependency from patentable independent claim 21.

**CONCLUSION**

For at least the foregoing reasons, Applicants submit that they have overcome the Examiner's rejections and that they have the right to claim the invention as set forth in the listed claims 21-23 and 25-43, of which claims 35-43 are new. The Examiner is invited to contact the undersigned at 503-425-6826 to discuss any matter concerning this application.

Applicants do not otherwise concede, however, the correctness of the Final Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicants hereby reserve the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited references, taken alone or in combination, based on additional features contained in the dependent claims that were not discussed above.

Applicants respectfully request further examination on the merits of this application.

Respectfully submitted,

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